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WHAT IS CLAIMED IS:

1. A disposable pull-on undergarment which comprises a liquid pervious top sheet, a liquid impervious back sheet and an liquid absorbent core interposed between the top and back sheets and includes front and rear waist-encircling regions opposed to each other, a crotch region positioned between the front and rear waist-encircling regions, and a waist-encircling opening and a pair of leg-encircling openings defined by joining respective longitudinal sides edges of the front and rear waist-encircling regions, with at least one of the front and rear waist-encircling regions being rendered elastically contractible in a waist-encircling direction;

said undergarment which further comprises the front and rear waist-encircling regions each having a first elasticized zone which extends in the waist-encircling direction from opposite longitudinal side edges of the region toward the vicinities of opposite side edges of the core, and a second elasticized zone which traverses the core to extend in the waist-encircling direction between the vicinities of opposite side edges of the core; and tensile stress of the first elasticized zone being greater than that of the second elasticized zone.

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2. The disposable pull-on undergarment of Claim 1 wherein said waist elastic members extending in the waist-encircling direction are attached in an extended condition to an edge portion of the waist-encircling opening, a plurality of auxiliary elastic members spaced longitudinally apart from each other by a specific distance and extending in the waist-encircling direction in the first and second elasticized zones are attached in an extended condition to a location between the waist elastic members and the edge portions of the leg-encircling openings, and the tensile stress of the auxiliary elastic members is greater in the first elasticized zone than in the second elasticized zone.

3. The disposable pull-on undergarment of Claim 1 wherein said waist elastic members extending in the waist-encircling direction are attached in an extended condition to an edge portion of the waist-encircling opening, a plurality of first auxiliary elastic members spaced longitudinally apart from each other by a specific distance and extending in the waist-encircling direction in the first and second elasticized zones are attached in an extended condition to a location intermediate between the waist elastic members and the edge portions of the leg-encircling openings, a plurality of second auxiliary

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elastic members spaced longitudinally apart from each other by a specific distance and extending in the waist-encircling direction in the first elasticized zone are attached in an extended condition to a location intermediate between the waist  
5 elastic members and the edge portions of the leg-encircling openings, and tensile stress of the first auxiliary elastic members is smaller than or equal to that of the second auxiliary elastic members.

10 4. The disposable pull-on undergarment of Claim 1 wherein said first elasticized zone when extended to a maximum extent exhibits an extension stress in a range of 0.2 - 2.0 N/25 mm and said second elasticized zone when extended to a maximum extent exhibits an extension stress in a range of 0.1 - 0.6 N/25  
15 mm.